

ABSTRACT OF THE DISCLOSURE

An orthogonal demodulating section converts the frequency of received signals to the lower range in batch after rejecting an image band thereof by an RF filter. An image rejecting section rejects the image band of the orthogonally converted output. It allows an enough image rejecting degree to be obtained. An A/D converter section converts the whole range into a digital signal and an orthogonal demodulating section demodulates a desirable channel by means of digital processing. Then, a channel selecting section selects and outputs the desirable channel. It then allows wide-bands to be received in batch, flexible processing to be achieved by the digital processing and an enough image rejecting degree to be obtained.